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Macroeconomic Adjustment and Growth

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Public Finance, Trade, and Development
The Chilean Experience

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Restructuring the public sector and eradicating chronic public sector deficits helped Chile lay the basis for microeconomic reforms that removed distortions and put Chile in a sustainable growth path. But macroeconomic policy errors of the late 1970s delayed the growth effects of these reforms.

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Macroeconomic Adjustment and Growth

What role did public finance and trade policies play in Chile's successful adjustment experience over the past 15 years? Vittorio Corbo draws these conclusions:

- The reforms in its public finances helped Chile to reduce both the large public deficit and the distortionary effects of taxes and revenues, in this way creating basic preconditions for sustainable growth.. Reducing the deficit required strong actions to decrease expenditures and increase revenues. Introducing a value-added tax and adjusting the tariffs of public utilities to reflect opportunity costs helped reduce the deficit. Structural reform of the tax system helped reduce the distortionary effects of the tax regime.

- Eliminating the large public deficit inherited from Allende's years was a major contribution to the slow but steady reduction of inflation. The reduction of inflation in turn made the liberalization of trade sustainable and supported the other microeconomic refrorms that helped Chile to restore growth.

- The recovery of the Chilean economy suffered a setback in the late 1970s. This was a consequence of the second stabilization attempt rather than of the structural reforms underway.

- The second stabilization attempt, undertaken in 1978, when inflation was down to 35 percent a year—similar to the average for the 1960s—worked at cross-purposes with the export-led growth being generated by trade liberalization.

- Indeed, using the exchange rate to stabilize a widely indebted economy not only created a short-term real appreciation of the peso, but encouraged external borrowing at a time when restrictions on capital inflows were being lifted and international capital markets were very liquid.

- The jump in expenditures that followed the fall in interest rates and increase in capital inflow caused the peso to appreciate further. The result was an unsustainable current account deficit that ran close to 25 percent of GDP in the first half of 1981.

- The appreciation squeezed tradables just when exporters were making inroads into world markets and when firms in the import-competing sector had completed a major adjustment to trade liberalization. Not surprisingly, firms in the tradable sectors suffered a squeeze on profits.

- Once the macroeconomic mistakes of the late 1970s and early 1980s were corrected, Chile recovered its growth and reduced inflation. This was achieved despite unfavorable terms of trade and a drastic reduction in the net transfer of resources from the rest of the world. Nontraditional exports, in particular, contributed greatly to the dramatic recovery—assisted by macroeconomic policies that supported real devaluation, kept inflation under control, and reduced the unemployment rate to below 6 percent.

This paper is a product of the Macroeconomic Adjustment and Growth Division, Country Economics Department. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Aludia Oropesa, room N11-035, extension 61758.

PUBLIC FINANCE, TRADE AND DEVELOPMENT:
THE CHILEAN EXPERIENCE

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I. INTRODUCTION

This paper analyzes the role of public finance and trade policies in the adjustment experience of Chile over the past fifteen years. The case of Chile is usually cited today as an example of successful adjustment. Indeed, in the early 1970s Chile faced large macroeconomic disequilibria and major and widespread microeconomic distortions. Macroeconomic disequilibria were manifested in the form of a large and unsustainable current account deficit, a public sector deficit of over 30 percent of GDP, and an inflation rate of over 490 percent per year in spite of widespread price controls.

Microeconomic distortions were present in the form of a high level and a high dispersion of trade tariffs, interest rate controls, setting of controlled prices of commodities without relation to economic costs, credit allocation, wages disassociated from marginal product conditions, and restrictions to factor mobility.

The final objective of an adjustment program for a situation like the one that Chile faced in the early-1970s is to reduce inflation, achieve a sustainable current account deficit, improve resource allocation, move actual output close to potential output, and achieve a sustainable and acceptable rate of growth of output and consumption per capita. Here there is a clear issue of sequence. A change in relative prices plays a central role in providing the incentives for the adjustment to take place. However, the information given by relative prices is less useful in a situation in which inflation is high and unpredictable. The sustainable control of inflation is therefore a pre-condition to successful adjustment and should take precedence in the sequencing of macroeconomic adjustment policies (Corbo and de Melo, 1987; Fischer, 1986; Sachs, 1986).

Both theory and practice suggest that to stabilize successfully, in a situation in which monetization is directly linked to the financing of the public sector deficit, requires a credible reduction in the public sector deficit. The level of the deficit must be such that the need for monetary extension is compatible with the growth in the demand for money resulting from the projected output growth and a projected low inflation. Once the public sector deficit has been reduced and inflation has declined, it is then possible to concentrate on the other components of the adjustment program. Therefore, the credible reduction of the public sector deficit that Chile undertook beginning in 1974 was an integral component of its adjustment program. Moreover, due to high inertia, in spite of the drastic reduction in the public sector deficit, the reduction of inflation was a very slow process (Corbo 1985a). Once the fiscal situation was under control, and inflation become more predictable, the Chilean authorities started to make progress in the reduction of microeconomic distortions, including the integration of Chile into the world economy.

The purpose of this paper is to first review the Chilean public sector and trade reforms, and then to examine their role in the economic development of Chile. The paper is divided into six sections. After the Introduction, Section II presents a brief summary of the conditions in 1973 on the eve of the shift in Chilean policy. Section III focuses on the main policy reforms introduced by the military government over the 1973-82 period. Section IV looks at the public finance and trade reforms in some detail. The effect of the reforms on aggregate incentives and on the macroeconomic adjustment is the subject of Section V. Section VI presents the main conclusions. A chronology of the reforms is found in the Appendix.

II. THE PRE-REFORM PERIOD

Beginning in the 1930s, Chile pursued the classic strategy of import substitution for its industrialization. The government followed a set of policies designed to shift the domestic terms of trade in favor of the manufacturing sector at the expense of the agricultural and mining sectors. The greatest emphasis was given to trade policies -- quotas, tariffs and an overvalued currency -- all of which discriminated against exports. From 1950 to 1970, for example, the effective exchange rate for manufacturing was approximately 1.5 times the rate for agriculture and almost twice that for mining. The bias against exportables within these sectors was even larger (Behrman, 1976; Corbo and Meller, 1981).

Up until 1955 the trade policies, which were enacted mainly as ad hoc reactions to balance of payments problems, were highly restrictive. After 1955 these policies moved cyclically, switching back and forth from restrictive to more liberal, but still with tariff-induced import substitution at their core. By 1970, at the end of the Frei government, the economy was at the stage of mild trade liberalization. (For a review of trade policies up to the late 1960s, see Corbo and Meller, 1981.)

The structure of the effective rates of protection under the different trade regimes over this period, in addition to discriminating against exports, was characterized by considerable variation across industries. The rates ranged from 1,140 percent for coal and petroleum products (an import-competing sector), to -20 percent for exports in the leather and leather products sector. Such a range could hardly be justified by economic arguments.

The composition of imports during the 1960s showed the effect of this system of protection: only 15 percent of imports were consumer goods, about 30 percent were investment goods, and 55 percent were intermediate products. As the structure of imports moved away from consumption goods toward raw materials, parts and equipment essential to the industrial sector and without close domestic substitutes, the Chilean economy became more vulnerable to fluctuations in the world economy. Furthermore, the import-substituting strategy, by protecting capital-intensive activities, gave rise to only a low level of labor absorption. (For details on Chile, see Corbo and Meller, 1981; for a comparative study, see Krueger et al., 1981.)

There were no major restrictions on capital inflows during this period, although outflows were quite controlled. In retrospect, the inflows in 1968 are judged to have been too high in relation to the country's needs and to have contributed to an unwanted growth in the money base (Ffrench-Davis, 1973, p. 107).

By the end of the 1960s, GDP was stagnant while inflation was running around 30 percent a year and unemployment around 6 percent. During the 1960s as a whole, GDP grew at an average rate of only 4.2 percent a year, a low level when compared with the 6.4 percent annual growth of other upper middle-income developing countries in the same time frame (World Bank, 1983).

The Frei government was succeeded by the Allende government in 1970. During the three years of its rule, from November 1970 to September 1973, the Allende administration tried to implement a radical transformation. Because large increases in expenditures were not matched by increases in government revenues, the result was a large public sector deficit that resulted in monetary expansion and a balance of payments crisis. To suppress the inflation and address the severe balance of payments crisis, the government intensified price controls and trade restrictions across the economy. Control of foreign trade and credit, along with commodity rationing, became important parts of the macroeconomic policy of the time. The banking sector was also nationalized, a radical land reform program disrupted the agricultural sector, and the most important firms in manufacturing were taken over by workers and/or the government.

By the end of 1973 the Chilean economy was experiencing substantial macroeconomic imbalances. Internal and external imbalances resulted from a public sector deficit that increased from 6.7 percent of GDP in 1970 to 30.5 percent of GDP in 1973 (Table 2). The internal imbalance led to accelerating inflation even under widespread controls and rationing. The external disequilibrium was temporarily contained by widespread restrictions on foreign trade -- differentiated tariffs, multiple exchange rates, and extensive quantitative restrictions on imports and exports. With controlled interest rates that were negative in real terms, organized capital markets were almost nonexistent. When price controls were lifted in late 1973, the rate of inflation was roughly 1,000 percent a year.

The restrictions on commodity trade were varied and considerable by the end of 1973 (Torres, 1982). Ad valorem tariff rates ranged from 0 percent to 750 percent, with a mean value of 105 percent, a mode of 90 percent and a median of 80 percent. Among 4,952 tariff positions, 187 contained import prohibitions. For the 2,872 tariff positions, a 90-day non-interest-bearing deposit equal to 10,000 percent of the CIF value was required, and for 2,278 tariff positions a previous approval was required before presenting an import request.

Exchange rate policies were also drastically changed. During the Allende regime there was a shift from the three exchange rates of the late 1960s toward one with multiple rates for commodity trade. The successful crawling peg policy that had stabilized the real exchange rate in second half of the 1960s was abandoned in favor of a fixed nominal exchange rate. With domestic inflation substantially above international levels and with a growing public sector deficit, this policy could only be sustained first through an increasingly restrictive trade regime, and finally through a series of major devaluations. The culmination of these trends came in March 1973, with a crawling peg system for one of the six explicit exchange rates. Toward the end of Allende's administration, the ratio between the highest and lowest official exchange rate was 52 to 1. Not surprisingly, distortions and rent-seeking activities were widespread.

The domestic commodity markets were also highly regulated by the end of the Allende regime, with more than 3,000 prices being set by a government regulatory body, the Direccion de Industria y Comercio (DIRINCO). The labor market in the organized sector was characterized by low mobility, the result of large severance payments. The government was, directly or indirectly, a major employer.

III. THE MAIN POLICY REFORMS: 1973-82[1]

The military government that took power in 1973 had to contend with an economy suffering from widespread distortions and the worst inflation in Chile's history (Table 1). The public deficit was close to 30 percent of GDP and net foreign reserves were negative. Only by virtue of widespread price controls was inflation kept even moderately in check. Indeed, when the new government lifted the price controls in late 1973, inflation skyrocketed to 1,000 percent on an annual basis.

Given this situation, the military government spent its first two years trying to stabilize the economy. To eliminate the monetization of the public sector deficit, it introduced a major tax reform in 1974 and implemented large reductions in government expenditures in both 1974 and 1975. It also sold government assets inherited from the Allende years, a step that further reduced the need for monetization of the public sector deficit. Good prices for copper in 1974 and a rollover of 30 percent of the outstanding debt service in 1973 and 1974, in addition to the above measures, eased the adjustment to the first oil shock.

The government also lowered the nominal tariffs which had ranged, as noted, from 0 percent to 750 percent in the Allende years, to a maximum rate first of 140 percent and then 120 percent. It also lifted all commodity price controls and removed the constraints on domestic interest rates by June 1975. Following a large devaluation in late 1973, the relative incentives for the

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1/ Much has been written on the Chilean economic experiment. See, in particular, Corbo (1983, 1985a, 1985b and 1986), Edwards and Edwards (1987); Harberger (1982 and 1985) and Zahler (1983). This section draws on material from Corbo (1985b). For a chronology of these reforms, see the Appendix.

production of exportable goods improved substantially, while those for home goods (highly-protected and nontradable) and import-competing goods were reduced.

Still, by late 1974 and early 1975 an emerging external crisis had become increasingly apparent -- copper prices dropped almost 50 percent with respect to their 1974 value, while the price of oil stayed at four times its 1973 value. These exogenous factors forced the government to undertake a severe austerity program and a major devaluation. Moreover, in the period 1975-79, Chile implemented one of the most sweeping programs of reform in its economic history. The government lifted all remaining quantitative r ictions on trade and started a trade reform that reduced the tariffs even more to a uniform 10 percent by July 1979. In addition, in 1976 the military government unified the multiple exchange rate system and instituted a crawling peg targeted to achieve a fairly stable real exchange rate (with, however, two revaluations of 10 percent, the first in early June 1976, the second in March 1977).

In two areas liberalization was much slower, however. One was labor policy. Although labor markets were deregulated de facto by the loss of trade union power in the year following the military coup, most of the restrictive labor legislation inherited from previous governments was modified only slowly. There was, nevertheless, one major reform which was contrary to the thrust of the whole reform program -- a compulsory 100 percent backward wage indexation was introduced in October 1974.[2] (The prices of many nontradables, such as housing rent, school fees, mortgage payments, public utility tariffs and the like, had already been fully indexed backward for some time.) As is

2/ For a review of the indexation, see A. Edwards (1984).

discussed below, this was an undesirable development that finally resulted in an unsustainable appreciation of the real exchange rate and a macroeconomic crisis. The second area in which the reform effort was slow was the liberalization of capital inflows. After much fine-tuning, important liberalization was introduced only in June 1979.[3]

In the initial years of its rule, the military government had attacked inflation by controlling the growth of money. However, in early 1977, by which time Chile's economy had been significantly opened to trade, a debate developed within the government on the causes of inflation and the most appropriate way to deal with it. It was that debate which had led to the two 10 percent revaluations, which were seen as a way of lowering inflation and sterilizing part of the accumulation of reserves.

Toward the end of 1977 the government announced that it was going to target the rate of devaluation to exceed the rate of inflation to compensate the import-competing sector for the announced tariff reductions (this pre-announced devaluation schedule was called the tablita). In February 1978, Chile established an active crawling peg system with an explicit stabilization objective. For this purpose, the rate of crawl was established well below the difference between domestic and foreign inflation.

In June 1979, the exchange rate was fixed at 39 pesos per dollar, at the time the monthly rate of inflation was about 2.5 percent, substantially above the international level. Finally, in late 1979 the government introduced a new labor code that re-established collective bargaining, albeit for just a fraction of the labor force. It mandated that the lowest offer employers could make had to equal to the previous wage adjusted by inflation as measured by the CPI. This measure went well beyond the less extensive indexation that had been instituted in late 1974.

3/ See Appendix for details.

From 1979 to 1982, most of the policy reforms concentrated on improving the functions of domestic commodity markets and further deregulation of capital flows. One of the most important institutional reforms was also the introduction of a private pension system.

IV. PUBLIC FINANCE AND TRADE POLICIES IN CHILE

Public Finance Policies

Prior to 1975, Chile had a long tradition of a very powerful public sector. Not only was the public sector an important generator of employment in the general government, but public enterprises were well entrenched in the productive structure of the economy. The structure of the tax system in this period was characterized by multiple exceptional regimes with numerous groups receiving special treatment. Also, the presence of an indirect cascading tax system gave important incentives to the vertical integration of private enterprises. Such a system proved difficult to administer and encouraged evasion.

This section will first examine the behavior of the public sector budget, using available information for the 1960s.[4] Over the 1960-69 period, current receipts showed an increasing trend with the exception of only two years, 1963 and 1964. While revenues represented 29.2 percent of GDP in 1960, the same ratio reached 35.8 percent in 1969. As a result of changes in current revenues and expenditures, the government current account surplus was continuously increasing over time. In 1960, the surplus was 4.3 percent of GDP and reached 9 percent by 1969.[5] With respect to public investment behavior, there was a declining tendency from 1965 onwards; in 1966 public

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4/ The data obtained for this period only cover general government. There is a predominant view that public enterprises were a significant burden for the national budget, as massive subsidies were given through government pricing policies. Transfers were allocated by the general government for the financial support of state-owned firms. For this reason, the figures presented for this period may underestimate the overall imbalance of the broad aggregates of the public sector. Information is extracted from Chilean central government accounts; World Bank (1980, p. 375).

5/ This was due to rising copper prices, the creation of indexation for tax liabilities to avoid erosion from inflation, and a shorter lag in tax collection. In addition, some tax rates were increased and new levels were introduced.

investment represented 8.5 percent of GDP, while in 1969 it dropped to 7 percent. In terms of the overall surplus. the budget showed a persistent deficit over the entire period, oscillating in its size, and reaching significant magnitudes during the second half of the 1960s. Estimations made for that period show that the deficit fluctuated between 5.5 percent and 7.5 percent of GDP. The difference between the current account surplus and public investment is accounted for mainly by financial investment.

Tax receipts represented an increasing proportion of GDP during this period, with the proportion increasing from 16.8 percent to 18.2 percent. This evolution is explained basically by an upward trend in the indirect taxation ratio that grew from 9.2 percent in 1965 to 10.9 percent in 1969.

During the Unidad Popular government (1970-73), profound structural reforms were implemented. Expropriation and nationalization affected an important part of the productive private sector, and expansionary aggregate demand policies (higher government expenditures and significant monetary growth) were used to achieve the administration's proposed objectives. The public sector deficit rapidly reached 24.5 percent and 30.5 percent of GDP in 1972 and 1973, respectively; and the annual inflation rate ballooned to 118 percent and 488 percent, for the same years (Table 1). Over this period the government also took over many private enterprises, usually following labor unrest. These de facto expropriations created a heavy burden on the economy in terms of GDP losses resulting from the expropriated enterprises. Severe imbalances were widespread. Price controls were responsible for repressed inflation, and major distortions in relative prices prevailed.

When the military took power in September 1973 they inherited an untenable public finance situation that prompted several policy measures dealing with both the revenue and expenditure side of the budget. On the tax side, the first measures taken involved an upward adjustment of property values and the simultaneous creation of a one-time net wealth tax. Personal income tax was made more progressive, while the sales tax, the most important source of indirect taxes, was also raised. Through these measures the government obtained additional revenues of 1.7 percent of GDP from the direct taxes, and 2.9 percent from the indirect taxes (Table 2). By the end of 1974 direct taxation accounted for 35 percent of tax revenues.

In the case of indirect taxes, the contribution of international trade duties increased substantially, even though the average tariff applied fell from 94 percent by the end of 1973, to 80 percent at the end of 1974. Trade taxes as a share of GDP increased a full percentage point between 1973 and 1974 (Table 3). This increase in receipts was the consequence of several factors: the elimination of the black market; the large real devaluation of late 1973; the abolishment of tariff exemptions for public agencies; and, improvement in tax administration.

On the revenue side, there were generalized adjustments in the tariffs of public enterprises which resulted in almost a 9 percent of GDP increase in revenues from net sales of goods and services from 1973 to 1974 (Table 2). Important state-owned companies such as ENAP, ENDESA, and CHILECTRA multiplied their prices in real terms by more than 900 percent. The state telephone company adjusted its real prices by over 100 percent of their 1973 level. These efforts resulted in the elimination of massive deficits in public enterprises, and the establishment of relative prices closer to opportunity costs. Other sources of reduction in fiscal pressures were the privatization of an important number of firms, as well as the elimination of the subsidies to the area of social ownership (a large number of firms in the manufacturing sector that had been taken over by the government during the

Allende years), which represented savings in expenditures of 9.5 percent of GDP in 1974.

Turning now to the evolution of the main accounts of the general government (Table 3), the current expenditures which had reached 33 percent of GDP in 1972, were rapidly adjusted downwards by almost 7 percent of GDP by the end of 1973. Wages and social security contributions were the central variables involved in the adjustment. Together they were reduced by more than 9 percentage points. There is some evidence from real wages and employment indicators that the reduction, at least in the initial stages, basically came from a contraction in earnings. Revenues fell in the same year by almost 6 percent of GDP.[6] This was the consequence of the operation of the Olivera-Tanzi effect in the Chilean economy. The acceleration of open inflation with the lifting of the price controls significantly contributed to the erosion of public receipts. However, the net result of these policies was a reduction in the public sector deficit from 30.5 percent of GDP in 1973 to 5.4 percent of GDP in 1974 (Table 2).

In contrast to the declining current government expenditures, and the necessity of cutting government expenditures for stabilization purposes, public capital formation expenditure increased from 8.4 percent to 12.5 percent of GDP as shown in Table 1 for 1973-74. Accompanying the fiscal contraction, there was a reduction in the flow of internal financing to the public sector from 30.4 percent of GDP in 1973 to only 5.5 percent of GDP in 1974. Since non-monetary financing was very small most of this reduction was in the form of central Bank credit to the public sector. As a result, the ratio of issuance of high-powered money to GDP fell from 9.3 percent in 1973 to 5.2 percent in 1974. In terms of the expansion of the credit given to the

6/ For more details about general government accounts, see Larrain (1988).

public sector, there were major reductions in nominal growth, although the monetary base continued to grow at nominal rates of more than 300 percent annually (Corbo 1985b).

As part of the domestic adjustment to severe external shocks, a further fiscal adjustment was initiated in 1975. It included severe reductions in current government outlays, and a 10 percent temporary jump in income and property taxes and excise taxes on luxury goods.

At the same time, a major fiscal reform was implemented with the purpose of generating additional resources for the budget and reducing the relative price distortions created by the tax system. The reform incorporated the replacement of the old cascading sales tax by a uniform value added tax of 20 percent; the introduction of full indexation of the tax system; the incorporation in the tax base of the undistributed corporate earnings; the elimination of preferential treatments, exemptions and taxes on capital gains; the increase in road tolls and petroleum excises; the integration of the personal and business income tax; the increase of 10 percentage points in the income and property tax rates; and, a reassessment of the rural and urban real estate values.

In addition to raising resources and reducing distortions, these reforms were intended to reduce the incentives to evade taxes through better enforcement and the elimination of loopholes. Furthermore, the public enterprises continued their adjustment with the final objective of becoming at least self-financing and eventually profitable through the improvements in operational efficiency and price corrections. In 1975 the consolidated public budget reached an overall deficit of 2 percent of GDP (Table 2), in spite of a serious recession in which GDP fell by more than 12 percent (Table 1). There were government expenditure items which increased as a proportion of GDP such as social security contributions, transfers to the private sector, and interest on public debt. These increasing expenditures made the required adjustment even more difficult, as they represented an additional disbursement of 5.3 percentage points of GDP. This phenomenon can be explained first by rigidities in the absolute level of social security payments and the generalization of unemployment benefits as the unemployment rate sharply increased during the recession; and second, by the deregulation of financial markets that resulted in a large increase in the observed interest rate.

The burden of the adjustment on the expenditure side was carried mainly by the government wage bill as it decreased by 0.8 percent of GDP. In fact, the government continued its policy of personnel reduction. Between 1973 and mid-1977 nearly 100,000 public employees were fired. Public investment fell more than 3.4 percentage points of GDP in 1975, returning to the historical levels of below 10 percent of GDP (Table 2). This was the consequence of not only the stabilization program, but also of a deliberate decision taken by the government authorities that the private sector should take the leadership with respect to the expansion of the economy.

On the revenue side, the government collected further funds, measured as a proportion of GDP, as a direct result of its new tax policy. A profound deterioration in the terms of trade negatively affected the resources transferred to the consolidated budget by the copper enterprises. The replacement for this loss of revenue came from the increased tax burden on the private sector which resulted from the tax reform. In 1974, the current revenues of the general government represented 30 percent of GDP, whereas in 1975 this ratio grew to 34.9 percent of GDP (Table 3). This movement is explained by higher revenues relative to GDP obtained from property and income taxes, additional resources which accounted for 2.2 percent of GDP. At the same time further resources were also collected from indirect taxation. In total, tax collection increased more than 4 percentage points of GDP, with most of this change explained by the introduction of the VAT and the changes in direct taxation implemented as part of the stabilization package and the tax reform. Further achievements in the normalization of public finance were made in 1976 as the chronic deficit of the non-financial public sector turned into a surplus of almost 4 percent of GDP for the first time in decades. This time the contribution to current revenues came mainly from higher non-tax revenues of almost 5 percentage points of GDP (Table 2).

On the expenditure side there was overall stability, but change in composition across different items. Thus, an additional adjustment took place in the personnel outlays which fell from 14.8 percent of GDP in 1975 to 12.1 percent of GDP in 1976. At the same time, associated with the sharp increase in unemployment, the increase in the payments of unemployment benefits is reflected in the expansion of the transfers and subsidies to the private sector observed between 1975 and 1976 that accounted for almost 2.3 percentage points of GDP. There was also a downward movement in the interest payments of the public debt. However, investment behavior was the key for explaining the overall surplus reached. The government decided to reduce investment spending by more than 3 percentage points, falling to levels of approximately 6 percent of GDP.

Nineteen seventy-seven was a recovery year for the economy. Current revenues of the consolidated budget were similar to those of the previous year. There were some changes in the composition of taxation as direct tax revenues diminished from 9.6 percent of GDP in 1976 to 8 percent of GDP in 1977, and indirect taxation increased from 14 percent to 14.9 percent of GDP. The downward movement in direct taxation is explained by decreasing property tax collection, while the evolution of indirect taxation was mainly influenced by the increase in international trade taxes by more than 1 percentage point. Although the government had undertaken a generalized tariff reduction, the movement in trade tax revenues reflected an increase in the import-to-GDP ratio, as the economy was becoming more open to foreign trade. On the expenditure side, the wage bill increased from 12.1 percent of GDP in 1976 to 15.8 percent of GDP in 1977, and public investment showed a recovery to levels near 7 percent of GDP.

Table 3 indicates that from 1977 until 1980 general government spending showed a decreasing trend from 33 percent to 24.5 percent of GDP, reflecting an expenditure-cutting policy in a number of areas. On the revenue side, indirect taxation became increasingly important. Property taxes declined over the 1977-80 period. The improvement in VAT administration explained its increasing significance in public revenues. The public sector surplus was largely due to improved public savings plus curtailed public investments. The first was the result of the policy of reducing the size of personnel outlays and other expenditures, whereas the second was the consequence of a deliberate policy of retrenchment. In fact, Table 2 shows that wage expenditures declined from 15.8 percent in 1977 to 13 percent of GDP in 1980.

The surplus of the public companies continued, growing with further improvements in efficiency and higher tariffs, set in many cases according to the marginal cost criterion. The priority given to social spending in conjunction with the costs of the social security reform accentuated austerity. In particular, special emphasis was given to restricting the level of public investment. In fact, public investment fell from close to 7 percent in 1977 to 5 percent of GDP in 1981 (Table 2). The intensity of the austerity effort of the public sector can be better understood when one considers that during the social security reform the public sector transferred a large portion of its social security contributions to the private sector, as many workers chose to switch to the new capitalization system. There was a simultaneous increase in the payment of the public sector by the recognition of past contributions of those who changed from the old system to the new one. Thus, part of the deterioration in the public sector surplus is just an accounting device. The government stopped collecting social security taxes, but at the same time transferred resources to private institutions administering pension funds to cover the contributions of the people that changed systems and also stopped acquiring future pension liabilities.

As a consequence of the overvaluation of the peso and of the low international price of copper, in 1981 there was a reduction in revenues from the tax on copper that represented 2 percent of GDP (Table 3). The social security reform enacted in 1981 accounted for lower contributions to the public sector of 0.8 percent of GDP. However, in terms of expenditures, even though wage expenses continued to decrease in 1981, social security payments went up from 7.1 percent to 8.2 percent, as a result of the social security reform. At the same time, the subsidies given to the private sector increased from 4.1 percent to 6.9 percent. Overall, the surplus of the public sector fell to 0.8 percent of GDP (Table 2).

During the recession of 1982, there was a severe contraction in public sector revenues in real terms. Current revenues as proportion of GDP decreased from 34.2 percent of GDP in 1981 to 33.9 percent of GDP in 1982. Although the ratio for direct taxes remained constant, significant fiscal revenues were lost from income taxation. This was off-set by the lower absolute deterioration in revenues from copper taxes than in GDP, thanks to a real devaluation. As a result, the absolute loss of direct tax revenues was of the same magnitude as the fall in GDP.

The revenues from indirect taxation were also affected sharply by the crisis. The ratio of indirect taxes levied on goods and services to GDP remained more or less the same, but the evidence for import levies revealed a contraction higher than the one for GDP, declining from 2.3 percent to 1.4 percent of GDP (Table 3). The severe recession of 1982 had a tremendous negative effect on government revenues. At the same time, the share of current public sector expenditures increased almost 6 percentage points of GDP, reflecting to some extent the presence of downward rigidity.

Interest payments in 1982 increased because of a pre-determined level of debt, the higher interest rates, and the decline in GDP (Table 2). Subsidies increased as a proportion of GDP as they were used to compensate several sectors negatively affected by the crisis. The wage bill decreased in absolute terms by less than the decline in GDP. Relative to GDP it increased from 11.8 percent in 1981 to 12.2 percent in 1982 (Table 2). As expected, the pension payments went up and contributions went down after the social security reform. Adding the surplus generated by the new pension system to the overall deficit of the public sector resulted in an overall deficit of 0.7 percent of GDP compared to a true public deficit of 3.4 percent.

Capital formation remained stable in levels that bordered 5 percent of GDP. In 1983 the revenue generated from indirect taxation showed a significant recovery, especially in international trade as the uniform tariff was raised in June from 10 to 20 percent. Meanwhile, income tax revenue decreased. Further adjustments were applied to the earnings of the public employees, with the wage bill dropping from 12.2 to 10.7 percent of GDP. Overall, the budget showed a deficit of 3 percent of GDP. The surplus coming from public corporations recovered in this period, as a real devaluation generated higher benefits for the companies selling tradable goods.

In 1984 the government initiated another fiscal reform effort. This time it focussed on the direct tax system. In principle, the goal was to reduce the bias against savings that results from a direct tax based on income. By applying an approach based on the taxation of expenditures, the government hoped to increase private investment and savings. The main elements of the tax reform were:[7]

- A gradual reduction was taken in the marginal rates of the personal income tax as well as an enlargement of the marginal income within a bracket. The maximum reduction was implemented in the highest bracket of income; the marginal rates for this income level were reduced from 58 to 50 percent. (Due to a poorer fiscal performance than expected, restrictions, an important part of the marginal rates reductions, were not implemented.)
- The tax base for income was reduced by allowing a deduction of up to 20 percent for the purchase of stocks. This deduction could not be higher than 20 percent of the tax base.
- Measures were taken to eliminate some of the discrimination among different sources of incomes.
- Only distributed profits were considered in the income base.

In 1984, for the first time since 1981 the non-financial public sector achieved positive savings in its current account. There were higher revenues in both income and indirect taxes. A new upward adjustment from 20 to 35 percent in the uniform tariff rate was adopted. As a result, revenues

7/ For a complete description of the reforms, see Marfan (1984).

from international trade taxes increased from 2.3 to 3.3 percent of GDP (Table 3). Partly reflecting the effects of the tax reform, indirect taxation showed an expansionary trend, increasing from 14.6 percent of GDP in 1983 to 17.1 percent in 1985. Non-tax revenues were stable over the period.

On the expenditure side of the non-financial public sector, wages and salary expenses continued their contraction, as they declined from 10.7 percent to 9.7 percent of GDP over the 1983-85 period. With the exception of interest payments, other major current expenditures remained more or less stable.

Gradually, the government began to increase the share of public investment in GDP, while the public deficit declined from 1984 onwards (Table 1). In 1984 the public deficit accounted for 4.4 percent of GDP; by 1987 this indicator dropped to 1.6 percent. This result had been possible by the means of a tremendous savings effort made by the public sector. Not only were general government expenditures adjusted in relation with the evolution of the revenues, but public enterprises continued to increase their operating surpluses. In part, this reflected the positive effect of the real depreciation on the net revenue of public enterprises in tradeable sectors (especially mining).

As noted above, fiscal policy had been extremely austere when we consider the significant deficit of the public sector inherited by the social security reform. One of the most dramatic structural adjustment policies undertaken by the Chilean government has been the elimination of the public sector deficit.[8] This was all the more impressive since it was accomplished

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8/ One need to qualify this statement by noting that in the period 1984-86 the Central Bank incurred large quasi-fiscal losses as a result of direct support to faltering financial institutions and from exchange rate losses. However, by 1987 most of these losses had disappeared.

at a time when the terms of trade losses were significantly affecting government revenues. Once the public sector deficit had been eliminated in 197j, the government was able to embark on other reforms. In particular, it began to reduce the severe anti-export bias of the trade regime by reducing the level and dispersion of tariffs and by lifting quantitative trade restrictions.

Different factors contributed to the dramatic turnaround in the public sector deficit. First, the introduction of a VAT system that resulted in substantial revenue collection. Second, an important reduction in the losses of public enterprises. Finally, a large reduction in the wage bill resulting from reduction in real wages and a decrease in public sector employment.

International Trade Policies During the 1974-87 Period

Before 1973 the use of quantitative restrictions and prohibitive deposit requirements was widespread. The tariff structure ranged from 0 to 750 percent, with a mean value of 105 percent, a mode of 90 percent and a median of 80 percent. Numerous tariffs positions were subject to an import deposit of 10,000 percent of the CIF value. Between September 1973 and July 1975, the maximum nominal tariff was reduced from 750 percent to 120 percent, while the weighted average dropped from 105 to 57 percent. By early 1974 the public sector was subject to the general regime of international trade. In August 1975 the economic authorities proposed a new tentative tariff structure with effective tariff rates ranging from 10 to 35 percent, and with effective protection being an increasing function of the degree of processing of each good. The trend towards trade liberalization continued so that by 1976 all quantitative restrictions were eliminated. In Septembe of the same year, prior deposit requirements on imports, excluding cars and used merchandise, were removed. The list of permitted imports was replaced by a short list of prohibitions. The proposed structure of tariffs was reached in August 1977, ahead of the original schedule. During this period the mean weighted tariff decreased from 44 to 19.7 percent.

In December 1977, the government announced its intention to achieve a uniform tariff of 10 percent by June 1979. This downward adjustment was done gradually by means of small monthly adjustments that pushed the weighted average tariff down from 19.7 percent to 10.1 percent. By June 1979 all items, with the exception of automobiles, were subject to a nominal tariff of 10 percent. The last important trade liberalization measure of the pre-recession period was the elimination of the list of forbidden imports.

Since June 1979, the tariff policy was modified by compensatory duties applied to countervail foreign dumping policies and by changes in the uniform tariff level. Surcharges plus the tariff could not exceed 35 percent. This policy, established in November 1982, affected 15 products in 1982, 15 additional ones in 1983, and 4 more in 1984. However, by the end of 1986 only 16 products were subject to compensatory duties.

From 1983 onwards, several changes were introduced to the former uniform tariff of 10 percent. In June 1983 the tariff was increased to 20 percent as a response to temporary public resource needs. Later, the government permanently set the tariff level at 20 percent.

In September 1984 a new change in commercial policy was defined, raising the uniform tariff from 20 percent to 35 percent. Authorities justified the policy as a way of avoiding a crisis in the external and public accounts.

In February 1985, the new minister of finance announced his intention to adjust the level of the uniform tariff downward. Under the program, it was proposed that the uniform tariff reach levels of 30 percent and 25 percent in the first semester of 1985 and 1986, respectively. By March of 1985 the tariff level reached 30 percent and in June of the same year a further reduction to 20 percent was taken, not only surpassing the targeted level but also ahead of schedule. Finally, in January 1988 the level of the uniform tariff was further reduced to 15 percent.

V. THE EFFECT OF THE REFORMS

What was the effect of these macroeconomic (fiscal, monetary and exchange rate policies) and trade policies on the evolution of the Chilean economy? We will start our analysis by examining the effects of the reforms on the evolution of inflation and the real exchange rate. The former is a key indicator of macro stability and the real exchange rate has important resource allocation effects.

As the public sector deficit began to be reduced, the need for monetary financing slowed down and so did inflation. The relation between monetization of a public sector deficit and inflation can be obtained by examining the equilibrium in the money market (for a recent reference, see Dornbusch and de Pablo, 1988). Assuming that the public sector deficit is g percent of GDP and fully monetized the increase in the supply of money is

$$(1) \qquad \dot{M} = g(\pi)Y \cdot P$$

where Y is real GDP, π is inflation, P is the price level. Here we assume $g'(\pi) > 0$ due to the Olivera-Tanzi effect (Olivera, 1967; Tanzi, 1977).

Assuming that the demand for money is given by the following velocity equation $V = \alpha + \beta\pi \quad \alpha, \beta > 0$ and assuming monetary equilibrium, we obtain

$$(2) \qquad \frac{PY}{M} = \alpha + \beta\pi.$$

Substituting (2) into (1) and using the steady state relation $\pi = \theta - y$, where θ is the rate of growth of money and y, the rate of growth of real GDP, we finally obtain

$$\pi = \frac{\alpha g(\pi) - y}{1-\beta g(\pi)} \quad \text{stability for } g(\pi) = g \text{ requires } 1-\beta g>0.$$

For $g(\pi) = g$ we get $\pi = \frac{\alpha g-y}{1-\beta g}$, with inflation an increasing function at an increasing rate of the budget deficit to GDP ratio (g).

By using this model we infer that as g decreased, the long-run steady state rate of inflation decreased. However, the slowdown of actual inflation was much slower than the trajectory for the steady state rate of inflation. Indeed, by 1976, while the public sector deficit as a share of GDP had been reduced from a deficit of 30.5 percent in 1973 to a surplus of 3.9 percent, inflation was reduced from 418.1 percent per year in 1973 to 250.79 percent per year in 1976 (Table 1).

The slow reduction of inflation can be attributed to strong inertia in an economy with widespread backward indexation of financial, labor and commodity contracts. Strong evidence on inertial inflation for part of this period is presented in Corbo (1985a). There is much discussion about the role of monetary policy during this period.

Harberger (1982) concludes that there was no monetary crunch to force a sharp cut in money supply as a result of monetary expansion for foreign exchange accumulation. While Edwards and Edwards (1987) conclude that there was a policy of tight money (pp. 31-33). However, the sharp increase in real interest rates and the decrease in $\frac{M1}{PY}$ and $\frac{M2}{PY}$ while inflation was being reduced provide strong evidence that monetary policy was tight (Table 4).

On the real side, following the large public sector adjustment that resulted in a reduction in the public sector deficit equal to 25 percentage points of GDP, real GDP growth achieved 1.0 percent following a drop of 5.6 percent in 1973 (Table 1).

In late 1974 and early 1975, when international capital markets were practically closed for Chile, copper prices were cut almost in half and the price of oil quadrupled. The terms of trade loss was substantial and as neither financing nor foreign reserves were available, there was no other option but to undertake a radical adjustment program. The real exchange rate was devalued a further 22.9 percent in 1975 and the public sector achieved a surplus equal to 3.9 percent of GDP.

Because of the fiscal and monetary crunch, the price stabilization effort and severe external shocks, Chile's GDP dropped 12.9 percent in 1975. The successful fiscal adjustment was even more dramatic if one considers this drop in GDP. Beginning from that low level in 1975, Chile achieved substantial success, as GDP growth reached 3.5 percent in 1976 and then surpassed 8 percent for three consecutive years. Moreover, inflation was reduced and the balance of payments crisis had been left behind. Non-copper exports grew at 31.7 percent per annum between 1975 and 1979.[9] Furthermore, while trade was being liberalized manufacturing output was growing at 7.6 percent per year over the 1975-79 period. The average annual rate of growth of GDP reached 7.5 percent. This performance was largely attributed to a "realistic" real exchange rate (Graph 1), the opening up of the economy to foreign trade, and by the dismantling of numerous government controls across all markets.

An active crawling peg policy, with a decreasing rate of growth, was introduced in February 1978. It was later replaced in June 1979 by a fixed rate, which led to the beginning of the appreciation of the real exchange rate.

The active crawling peg policy was the main stabilization device and induced a major portfolio adjustment which resulted in major capital inflows. In effect, the active crawling peg amounted to a devaluation (at a decreasing rate) substantially below the previous month's inflation. Thus, the gap between domestic interest rates (determined mainly in a highly-distorted

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9/ Using the USA WPI as deflator for the value of exports, the volume of non-copper exports grew 19 percent yearly.

domestic financial market with large reserve requirements) and the expected devaluation -- augmented foreign interest rates, was considerably increased. The negative international real interest rates contributed to even a wider spread.

The large spread between domestic and foreign interest rates triggered large capital inflows.[10] Capital inflows went from $572 million in 1977, to $1,946 million in 1978, $2,248 million in 1979, $3,165 million in 1980, and $4,769 million in 1981. As a share of GDP net capital inflows grew from 4.3 percent of GDP in 1977 to 14.6 percent of GDP in 1981. (Corbo 1985b, p. 896)

The increase in capital inflows, and a drastic reduction in reserve requirements to reduce the taxation of financial intermediaries, resulted in a large monetary expansion. Consequently, this pushed the domestic interest rates down and supported a large expansion in absorption that reached an average annual growth rate of 10.5 percent per year for the period 1979-81. During 1979 and 1980 monetary policy was very expansionary, also as a result of drastic reduction in reserve requirements. The combination of tight fiscal and expansionary monetary policy and large capital inflows encouraged a large boom in private expenditures, especially investment. The final consequence of the unsustainable increase in expenditures was a large erosion in competitiveness, a very weak commercial account in the balance of payments, and heavy external borrowing. Indeed, the peso appreciation was a second and more intensive trade liberalization.

10/ Some observers (Edwards and Edwards, 1987, and Harberger, 1985) attribute most of the increase in capital inflows to the lifting of restrictions to these inflows. However, as indicated in the Appendix, significant restrictions to capital inflows remained until 1982. Furthermore, the large spread between domestic and foreign interest rates created large incentives for capital inflows and pressures on the central bank authorities for a lifting of the controls.

By the end of 1981 Chile was facing an unsustainable macroeconomic situation. The current account deficit was close to 15 percent of GDP and a large real appreciation was jeopardizing the entire liberalization experiment, especially the trade liberalization strategy.

The new external shock of 1982 in the form of a drastic reduction in external financing, a large increase in international interest rates, and a further drop in the terms of trade forced a drastic macroeconomic adjustment that was long overdue.

This change in macroeconomic fundamentals required a reduction in expenditures. The reduction in expenditures had to be accompanied by a much depreciated real exchange rate to avoid an increase in unemployment. At first, the government tried to achieve both objectives by allowing the supply of money to contract following the drop in foreign reserves. In an economy with still widespread indexation, the monetary contraction did not help much in accomplishing a real devaluation and instead resulted in a drastic contraction in production. Not surprisingly, the unemployment rate increased sharply from 11 percent in March 1981 to 25 percent in June 1982, in spite of massive public employment programs that were "employing" another 6 percent of the labor force. By the middle of 1982 the orthodox adjustment program was abandoned, wage indexation was eliminated, and a series of nominal devaluations were introduced to produce a large real devaluation. The drastic recession of 1982, and the large devaluation initiated in the second half of that year unveiled a major financial crisis that resulted in the government's intervention of the main private financial institutions. The renegotiation of the external debt followed suit.

Between 1982 and 1987 the real devaluation reached 117.3 percent. After the large recession of 1982 and a small drop in GDP in 1983, real GDP growth averaged 5.0 percent per year. The average unemployment rate that had reached 22.1 percent in 1982 had been reduced to 12.3 percent by 1987. After some increase in inflation following the large nominal devaluation of the previous years, the rate of inflation slowed down to 19.9 percent in 1987. The public sector deficit was reduced to 1.6 percent of GDP in 1987.

After the initial stages of crisis management, which involved some reform reversals such as an increase in tariffs (Graph 2), Chile resumed with full vigor its previous policy of export-oriented growth. After the traumatic experience of 1982-84, the macroeconomic policy mix aimed at achieving a real exchange rate compatible with the main underlying fundamentals (terms of trade, interest rates and resource transfers. To accomplish this, since the end of 1982 monetary and fiscal policies have been moderate and the peso has been devalued daily in order to achieve a much depreciated real exchange compatible with the changes in fundamentals (Fontaine 1987).

As a response to the resulting real devaluation, there has been a drastic increase in private and public savings, and an increase in private and public investment, non-copper exports reached an average yearly growth of 10 percent in real terms over the period 1984-87, GDP a growth rate of 5.0 percent, and the unemployment rate dropping to 12.3 percent (Table 1). Finally, the net resource transfer was reduced from a net inflow of 12.9 percent of GDP in 1981, to a net outflow of 4.9 percent of GDP in 1987 (Table 5). Thus, the turn around in net resource transfers was an astonishing 17.8 percentage points of GDP.

VI. CONCLUSIONS

Four main conclusions can be drawn from Chile's experience. First, the liberalization and stabilization reforms implemented during the early years of the military government, in spite of the unfavorable external shocks of 1975, succeeded until late 1978, in slowing down inflation, reducing sharply net transfers and recovering growth.[11] Furthermore, as this adjustment was taking place the debt to GDP ratio was almost constant over the 1974-79 period (Table 5, column 4).

Second, the reduction of a large public sector deficit required strong actions, both on the expenditure and revenue side. The introduction of a value added tax, and the adjustment in the tariffs of public utilities to reflect opportunity costs, made major contributions to the reduction of the deficit. Structural reforms in the entire tax system were important in reducing the distortionary effects of the tax regime.

Third, the elimination of a large public sector deficit is a necessary but not sufficient condition for the control of inflation. Indeed, as the recent literature has shown, inertial inflation can make inflation reduction without income policies a slow and costly process (Kiguel and Liviatan, 1988). The second stabilization attempt, undertaken when inflation was down to 35 percent a year -- a level similar to the average for the 1960s -- worked at cross-purposes with the export-led growth being generated by the liberalization of trade. Indeed, the use of the exchange rate to stabilize a widely indebted economy created not only a temporal short-term real appreciation of the peso, it also encouraged external borrowing at a time

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11/ Of course, part of the favorable growth is due to the low base following the 1975 recession, but one also needs to take into account the sharp drop in terms of trade.

when the restrictions on capital inflows were being lifted and international capital markets were very liquid. The large rise in expenditures that followed the decrease in the interest rate and the increase in capital inflow caused the peso to appreciate further. The result was an unsustainable current account deficit that ran close to 25 percent of GDP in the first half of 1981. The appreciation squeezed tradables just when exporters were making inroads into world markets and when firms in the import-competing sector had completed a major adjustment to the trade liberalization. Not surprisingly, firms in the tradable sectors suffered a large squeeze on profits (Corbo and Sanchez, 1985; Galvez and Tybout, 1985).

Fourth, once the macroeconomic mistakes of the late-1970s and early-1980s were corrected, Chile recovered its growth and reduced inflation. This was achieved in spite of a drastic reduction in the net transfer of resources received from the rest of the world and unfavorable terms of trade.

Table 1

ANNUAL MACROECONOMIC INDICATORS

	Gross Domestic Product Tradables 1/	Non-Tradables 2/	Total	Absorption 3/	GDP Deflator 4/	CPI	Unemployment Rate 5/	Price of Copper	Public Deficit 6/	Public Capital Formation 7/	Total Gross Investment 8/	Terms of Trade 9/
	(Percent changes)						(Percent)	(Cents Per Pound)	(Percent of GDP)			(Index)
1960	-	-	-	-	-	11.6	7.4	30.8	-	-	13.9	130.9
1961	5.5	2.6	4.8	6.1	6.5	7.7	6.7	28.7	-	-	15.3	125.8
1962	5.7	5.2	4.7	2.5	13.4	13.9	5.3	29.3	-	-	12.4	134.1
1963	3.9	8.3	6.3	5.8	43.6	44.3	5.1	29.3	-	-	14.8	131.4
1964	4.5	0.1	2.2	2.9	47.3	46.0	5.3	44.1	-	-	14.2	133.9
1965	1.1	1.1	0.8	0.4	39.3	28.8	5.4	58.7	-	-	15.0	182.9
1966	12.9	8.0	11.2	16.5	28.5	22.9	5.4	69.5	-	-	16.3	186.2
1967	2.8	4.3	3.2	0.6	25.6	18.1	6.1	51.1	-	-	16.1	176.4
1968	3.9	3.8	3.6	4.8	33.9	26.6	6.1	56.1	-	-	16.3	188.6
1969	-0.8	8.8	3.7	5.8	39.9	30.7	6.2	66.6	-	-	15.1	222.8
1970	1.4	2.9	2.1	1.8	40.5	32.5	7.1	64.2	6.7	10.4	16.4	228.1
1971	9.2	8.8	9.0	9.7	18.4	22.1	5.5	49.3	15.3	10.5	14.5	172.3
1972	-0.8	-1.1	-1.2	1.0	86.9	117.9	3.8	48.6	24.5	9.6	12.2	166.2
1973	-7.3	-3.7	-5.6	-6.2	418.1	487.5	4.6	80.8	30.5	8.4	7.9	187.2
1974	6.6	-0.4	1.0	2.4	694.2	497.8	9.7	93.3	5.4	12.5	21.2	197.8
1975	16.6	-8.4	-12.9	-20.8	342.4	379.2	16.2	55.9	2.0	9.2	13.1	118.5
1976	5.3	1.6	3.5	0.2	250.7	234.5	16.8	63.6	-3.9	6.1	12.8	127.8
1977	7.8	9.4	9.9	14.2	103.5	113.8	13.2	59.3	-0.4	6.9	14.4	114.4
1978	4.5	9.6	8.2	9.7	56.6	49.8	14.0	61.9	-1.5	6.7	17.8	111.0
1979	7.0	10.0	8.3	10.5	46.3	38.6	13.6	89.6	-4.8	5.1	17.8	119.5
1980	5.5	10.0	7.8	9.3	29.2	35.1	11.8	99.2	-6.1	5.2	21.0	100.0
1981	3.8	5.4	5.5	11.6	12.2	19.7	11.1	78.9	-0.8	5.1	22.7	84.3
1982	-11.2	-10.8	-14.1	-24.1	13.3	9.9	22.1	67.1	3.4	4.7	11.3	80.4
1983	0.5	-6.1	-0.7	-4.6	26.6	27.3	22.2	72.2	3.0	4.8	9.8	87.5
1984	7.9	5.3	6.3	8.5	14.3	19.9	19.2	62.4	4.3	6.0	13.6	83.2
1985	2.5	2.4	2.4	-1.9	32.9	30.7	16.4	64.3	2.6	7.1	13.7	78.5
1986	6.7	5.0	5.7	5.4	19.2	19.5	13.5	62.3	1.7	7.5	14.7	82.0
1987	3.5	6.6	5.4	7.3	20.1	19.9	12.3	81.1	1.6	7.4	15.6	77.0

1/ Includes agriculture, fishing, mining and manufacturing. Until 1983 national accounts; from 1984 onward estimations based on sectoral information.

2/ Includes construction and services. The same methodology is applied here as in the case of GDP of tradables.

3/ Includes private consumption, public consumption, and total investment.

4/ The GDP deflator was obtained from the ratio between the nominal and the real GDP.

5/ Greater Santiago, Universidad de Chile. The data for 1987 correspond to the average of the last four quarters with available information.

6/ Considers general government and public enterprises; extracted from Larrain (1988) up to 1985. 1986 and 1987 were obtained from Fontaine (1987).

7/ Extracted from Larrain (1988) up to 1985 and thereafter from Fontaine (1987).

8/ Constructed from fixed gross investment, change in stocks and GDP at current prices. Sources: Indicadores Economicos y Sociales '60-'85 and Barandiaran (1988).

9/ Sources: Cuadernos Estadisticos de la Cepal, Indicadores Economicos y Sociales '60-'85 and Barandiaran (1988).

Sources: Indicadores economicos y sociales 1960-1985, boletin mensual, Banco Central de Chile from 1971 up to 1979, CPI correspondent to the one revised by Cortazar and Marshall (1980).

Table 2

OPERATIONS OF THE CONSOLIDATED NON-FINANCIAL PUBLIC SECTOR, 1970-85

(as a percent of GDP)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Current Revenue	38.14	37.65	3[illegible] 48	21.28	37.28	39.20	43.36	42.41	38.65	35.51	36.92	34.19	33.89	33.50	34.27	36.70
Taxes	25.50	26.35	23.80	20.37	23.50	27.60	26.94	26.52	25.50	25.73	26.31	25.22	22.78	22.44	23.76	23.17
Direct Taxes	7.73	6.19	4.28	5.68	7.39	9.59	9.55	7.97	8.09	7.16	7.33	5.75	5.73	4.99	4.65	3.68
Indirect Taxes	10.82	11.66	11.13	10.12	13.02	14.60	14.03	14.90	13.72	13.30	13.48	14.75	13.77	14.84	16.30	17.06
Social Security Contribution	6.96	8.51	8.19	4.58	3.09	3.41	3.36	3.66	3.69	5.27	5.55	4.72	3.28	2.81	2.80	2.42
Non-Tax Revenues	12.63	11.30	10.88	0.88	13.75	11.60	16.42	15.89	11.15	9.78	10.61	8.97	11.13	11.06	10.51	13.53
Net Sales of Goods and Services	6.33	4.87	5.82	-2.22	6.30	3.97	7.74	6.34	6.09	3.91	5.52	3.30	5.60	6.77	6.23	7.54
Profit Transfers and Other Revenues	6.31	6.43	5.06	3.10	7.46	7.63	8.68	9.55	5.06	5.87	5.09	5.67	5.53	4.29	4.28	6.00
Current Expenditures	30.86	39.45	46.41	41.05	30.63	31.29	31.73	33.84	27.89	26.55	26.35	29.08	35.17	33.55	33.66	32.86
Wages and Salaries	15.63	19.54	20.50	15.76	15.55	14.80	12.10	15.78	14.51	13.18	13.01	11.77	12.23	10.66	10.38	9.72
Social Security Payments	8.60	11.57	11.86	6.03	4.45	7.20	6.92	7.02	6.66	6.99	7.07	8.20	10.77	9.85	10.12	9.01
Transfers and Subsidies to Private Sector	3.43	1.82	2.28	1.73	1.96	3.08	5.35	5.20	2.89	3.63	4.14	6.91	9.05	8.67	8.17	7.99
Interest on Public Debt	1.13	1.75	1.55	2.67	2.95	4.25	3.14	2.37	2.80	1.81	1.49	1.45	2.29	3.86	4.68	5.74
Other	1.86	4.47	5.63	5.36	5.72	1.96	4.21	3.47	1.04	0.73	0.64	0.69	0.82	0.52	0.32	0.40
Subsidies to Social Area	0.00	0.00	4.80	9.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Savings	7.28	-1.79	-11.93	-19.70	6.62	7.91	11.63	8.57	8.76	8.96	10.57	5.18	-1.28	-0.04	[illegible].61	3.86
Net Capital Revenue	-3.57	-3.00	-2.96	-2.35	0.48	-0.58	0.19	-1.25	-0.47	0.87	0.21	0.36	2.11	1.78	1.05	0.84
Capital Formation	10.41	10.48	9.64	8.35	12.54	9.15	6.09	6.90	6.68	5.10	5.24	5.08	4.67	4.76	6.00	7.07
Tax Expenditure	41.27	49.93	56.05	49.39	43.17	40.44	37.82	40.74	34.57	31.65	31.58	34.11	39.84	38.31	39.66	39.92
Overall Surplus	-6.89	-15.28	-24.53	-30.48	-5.43	-2.02	3.94	0.42	1.54	4.75	6.14	0.84	-3.37	-3.03	-4.34	-2.80
Financing	6.69	15.27	24.53	30.48	5.54	2.02	-3.94	-0.41	-1.54	-4.77	-6.13	-0.83	3.37	3.03	4.34	2.80
External (Net)	0.09	1.66	1.82	0.08	0.30	-2.87	-3.09	-0.27	2.70	-0.04	-0.12	2.75	2.24	1.08	2.68	4.01
Internal (Net)	6.60	13.61	22.71	30.40	5.25	4.89	0.51	-0.15	-4.24	-4.71	-5.41	-3.57	1.13	4.12	1.65	-1.41

Source: Larrain (1988).

Table 2

OPERATIONS OF THE GENERAL GOVERNMENT, 1970-85
(percent of GDP)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Current Revenues	31.59	32.81	29.14	28.55	30.28	34.92	37.29	38.61	33.24	32.49	32.90	32.13	29.94	27.09	28.74	28.61
Taxes	25.50	26.35	23.60	20.37	23.50	27.60	26.94	26.52	25.50	25.73	26.31	25.22	22.78	22 44	23.76	23.17
Direct Taxes	7.73	8.19	4.28	5.68	7.39	9.59	9.55	7.79	8.09	7.16	7.39	5.75	5.73	4.99	4.65	3.69
Personal and business income	3.82	4.80	3.52	4.76	4.75	5.68	4.98	4.33	4.25	4.48	5.25	5.40	4.59	2.96	3.24	2.98
Copper companies	3.10	0.38	0.06	0.55	1.73	1.28	2.63	2.56	2.81	1.94	1.93	0.24	0.98	1.89	1.25	0.54
Property	0.81	1.01	0.71	0.37	0.91	2.65	2.03	1.09	1.03	0.74	0.15	0.12	0.15	0.14	0.16	0.16
Indirect Taxes	10.82	11.66	11.13	10.12	13.02	14.60	14.03	14.90	13.72	13.30	13.43	14.75	13.77	14.64	16.30	17.06
Goods and services	9.11	9.82	9.52	9.69	9.37	11.65	12.16	12.39	12.49	11.50	12.29	13.19	13.82	13.65	14.80	15.08
International trade	1.71	1.84	1.61	0.44	1.97	2.95	1.87	2.36	1.98	2.02	1.96	2.27	1.44	2.34	3.29	3.84
Other, net of VAT rebates	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.14	-0.75	-0.22	-0.82	-0.71	-1.19	-1.34	-1.38	-1.86
Social Security Contributions	6.96	8.51	8.19	4.58	3.09	3.41	3.36	3.66	3.69	5.27	5.55	4.72	3.27	2.81	2.80	2.42
Non-Tax Revenues	6.07	6.46	5.53	3.17	6.78	7.31	10.34	12.08	7.74	6.75	6.58	6.90	7.18	5.25	4.98	5.44
Sales of goods and services	1.76	1.57	1.09	1.21	0.68	1.04	2.19	3.12	3.26	2.43	2.45	2.20	2.44	2.23	2.49	2.63
Profit transfers and other revenues	4.31	4.89	4.45	1.96	6.07	6.28	8.15	8.96	4.47	4.31	4.14	4.70	4.74	3.02	2.48	2.80
Current Expenditures	25.27	32.21	33.01	26.02	26.33	27.57	31.03	33.00	26.68	24.77	24.49	26.82	31.89	20.53	30.74	29.55
Wages and Salaries	9.81	11.82	12.92	9.41	10.04	9.26	8.89	10.99	9.97	9.14	8.78	7.78	7.80	6.68	6.44	5.84
Purchase of Goods and Services	2.58	3.23	2.77	4.17	4.29	4.35	3.87	4.91	4.70	3.04	3.12	2.93	3.22	3.23	3.40	3.21
Social Security Payments	8.60	11.87	11.86	6.03	4.45	7.20	6.92	7.02	6.86	6.99	7.07	8.20	10.77	9.65	10.12	9.01
Transfers and Subsidies to the Private Sector	4.31	4.89	4.45	1.96	6.07	6.28	8.15	8.96	4.47	4.31	4.14	4.70	4.74	3.02	2.48	2.80
Interest on Public Debt	0.73	0.72	0.62	0.68	1.37	2.56	2.24	1.72	1.58	1.28	0.84	0.42	0.55	1.78	2.38	3.22
Internal	0.20	0.16	0.40	0.04	0.44	0.50	0.21	0.79	0.86	n.a	n.a	n.a	n.a	n.a	n.a	n.a
External	0.53	0.56	0.22	0.64	0.93	2.06	2.04	0.93	0.73	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Other	0.13	2.75	2.58	3.99	4.22	1.12	3.95	3.17	0.68	0.53	0.54	0.37	0.40	0.36	0.23	0.27

(Continued)

Table 3: OPERATIONS OF THE GENERAL GOVERNMENT, 1970-85 (percent of GDP) (Cont'd.)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Savings	8.31	0.80	-3.87	-2.47	3.93	7.36	6.25	5.60	8.55	7.72	8.42	5.51	-1.95	-2.84	-2.01	-0.94
Net Capital Revenue	-3.56	-2.99	-2.86	-2.21	-1.86	-1.64	-0.07	-0.50	-0.81	0.65	-0.82	-0.07	1.78	1.91	-0.74	0.39
Revenue	1.66	3.15	0.94	2.16	1.92	1.93	2.31	1.47	1.10	2.21	1.71	2.78	7.46	4.00	3.21	3.00
Less: financial investment and other transfers	-5.23	-6.14	-3.80	-4.38	-3.78	-3.58	-2.38	-1.96	-1.92	-1.57	-2.08	-2.85	-5.69	-2.09	-2.46	-2.61
Capital Formation	6.36	7.38	7.38	5.84	6.68	5.69	3.13	4.16	3.51	3.21	2.60	2.82	2.11	2.12	2.27	3.10
Total Expenditures	31.53	39.58	40.39	31.86	35.01	33.25	34.16	37.18	30.20	27.98	27.09	29.14	34.00	32.65	33.01	32.65
Overall Surplus	-3.51	-9.75	-14.12	-10.82	-6.61	0.02	3.04	0.93	2.22	5.15	5.50	2.92	-2.28	-3.04	-3.53	-3.66
Financing	3.50	9.76	14.12	12.27	6.72	-0.02	-3.04	-0.93	-2.22	-5.17	-5.49	-2.91	2.28	3.04	3.82	3.66
External (Net)	-0.07	-0.59	-0.09	0.95	4	-3.50	-2.49	-0.92	-0.53	-1.00	-0.75	-0.58	-0.34	-0.12	0.75	3.06
Drawings	1.12	0.7.	0.25	2.11	4.08	2.33	1.10	1.25	1.29	0.38	0.19	0.14	0.52	0.66	n.a	n.a
Amortization	-1.19	-1.29	-0.34	-1.16	-4.41	-5.83	-4.94	-2.17	-1.82	-1.38	-0.95	-0.67	-0.86	-0.78	n.a	n.a
Internal (Net)	3.58	10.35	14.20	11.32	7.06	3.47	0.80	-0.01	-1.70	-4.17	-4.73	-2.39	2.62	3.16	2.77	0.60
Banking System	3.14	12.45	14.42	10.23	5.90	2.80	1.28	-0.67	-1.16	4.70	-3.49	-2.12	2.78	2.90	n.a	n.a
Other discrepancies and statistics	0.43	-2.10	-0.22	-0.85	0.96	0.67	-0.48	0.66	-0.54	0.58	-1.25	-0.27	-0.15	-0.26	n.a	n.a

Source: Budget Office, Ministry of Finance

Table 4

FINANCIAL INDICATORS

	Capital Account (1)	Current Account (2)	Change in Reserve (3)	Errors and Omissions (4)	Change in M1 (5)	Change in M2 (6)	Real Interest (7)	Adjustable Interest (8)	Real Libor (9)	M1/GDP (10)	M2/GDP (11)
	(in percent of GDP)				(in percent)						
1969	2.7	-0.1	2.1	-0.6	40.2	40.2	3.7		8.0	14.2	14.5
1970	3.2	-1.0	1.3	-0.9	51.3	50.8			9.2	15.0	15.2
1971	0.4	-1.8	-2.2	-0.8	98.6	94.5			-12.5	23.1	23.0
1972	3.8	-3.1	-0.7	-1.4	98.0	91.3			-23.0	24.5	23.8
1973	4.3	-2.8	0.9	-0.6	272.5	285.5			3.7	18.7	18.7
1974	1.8	-1.9	-0.7	-0.6	259.8	305.6			39.3	8.4	9.5
1975	5.0	-6.8	-3.1	-1.3	249.1	298.5	16.0		32.6	7.6	9.8
1976	0.2	1.5	2.4	0.7	195.3	274.8	64.3		-15.7	6.2	10.1
1977	4.7	-4.1	1.2	0.7	116.9	163.1	56.8		-17.8	6.0	11.9
1978	13.1	-7.1	5.1	-0.9	73.4	117.6	42.2		7.5	6.1	15.3
1979	11.8	-5.7	6.1	-0.1	59.5	74.[illegible]	16.6	22.9	-3.4	6.2	16.8
1980	13.4	-7.1	6.4	0.2	59.4	58.	11.9	15.3	-11.5	7.1	18.6
1981	[illegible]	-14.5	-0.9	0.3	8.7	53.8	38.7	14.5	-2.5	6.5	24.2
1982	4.9	-9.5	-4.9	0.3	-9.0	4.1	35.1	16.9	34.7	6.1	25.9
1983	2.5	-5.6	-2.8	0.3	26.8	-9.6	16.5	10.0	33.6	6.1	25.9
1984	10.4	-10.7	0.2	0.5	7.6	31.4	11.7	9.0	15.9	5.4	20.1
1985	7.9	-8.3	-1.2	-0.7	28.3	38.1	11.5	9.4	35.7	5.1	20.4
1986	6.3	-6.5	-0.5	-0.3	44.1	24.7	6.4	7.6	7.1	5.8	20.2
1987	6.5	-4.8	0.5	-1.2	7.6	44.5	9.6	7.3	1.8	5.0	23.0

(1) = (3)-(2)-(4)
(3) Corresponds to the change in the stock of reserves of the Central Bank defined as assets less use of IMF credit.
Columns (5) and (6) were constructed based on an average holdings variations between end-of-year months.
Until 1979 the source is Moran, C.(1983), Estadisticas trimestrales de producto y dinero para la economica chilena: 1960-81.U. de Chile.
From 1980, Sintesis Monetaria and Informe Economico y Financeri, Banco Central de Chile.
(7) Corresponds to the expost real interest rate for one month loans; from 1975 until 1982 bank rates; from 1983 average of the financial system.
(8) Indexed interest rates charged for three-months to one-year operations.
(9) Corresponds to the LIBOR for six months operations expressed in real terms.

Source: indicadores economicos y sociales 1960-1985, sintesis monetaria, informe economica y financiera, Banco Central de Chile.

Table 5

SELECTED EXTERNAL INDICATORS

	Non-Copper Exports (million of 1987 US$) 1/	Private Debt 2/	Public Debt 3/	Debt Ratio 4/	Resource Balance 5/ (percentage of GDP)
		(millions of US$)			
1960	480.1	222	400	14.5	-8.2
1961	518.8	330	465	16.6	-9.6
1962	550.0	426	563	17.4	-7.2
1963	533.1	448	700	26.4	-6.6
1964	747.0	484	815	19.8	-7.4
1965	813.4	499	970	24.0	-7.0
1966	823.7	539	1,058	24.3	-12.2
1967	686.2	536	1,236	26.0	-9.3
1968	678.7	634	1,456	30.9	-10.6
1969	714.3	770	1,777	33.4	-12.8
1970	758.0	549	2,218	33.7	-12.5
1971	803.1	441	2,305	25.9	-13.3
1972	596.4	413	2,589	24.3	-15.9
1973	594.2	399	2,862	31.6	-15.1
1974	1,011.7	443	3,583	36.4	-11.3
1975	1,267.1	670	3,597	59.1	-1.2
1976	1,481.9	799	3,475	43.3	2.1
1977	1,619.7	990	3,520	33.8	-1.8
1978	1,822.4	1,570	4,353	38.5	-3.2
1979	2,539.8	2,736	4,771	36.2	-5.2
1980	2,951.2	4,693	4,720	34.1	-6.7
1981	2,200.6	8,138	4,415	38.5	-12.9
1982	2,076.0	8,658	5,157	56.8	0.2
1983	1,984.9	8,143	6,689	75.0	4.1
1984	2,026.5	6,362	10,601	88.2	2.2
1985	2,005.8	5,479	12,161	110.1	6.4
1986	2,505.3	4,826	12,942	105.6	6.6
1987	2,900.5	2,627	14,725	92.6	4.9

1/ Deflated by the USA WPI.

2/ Includes only medium- and long-term external debt.

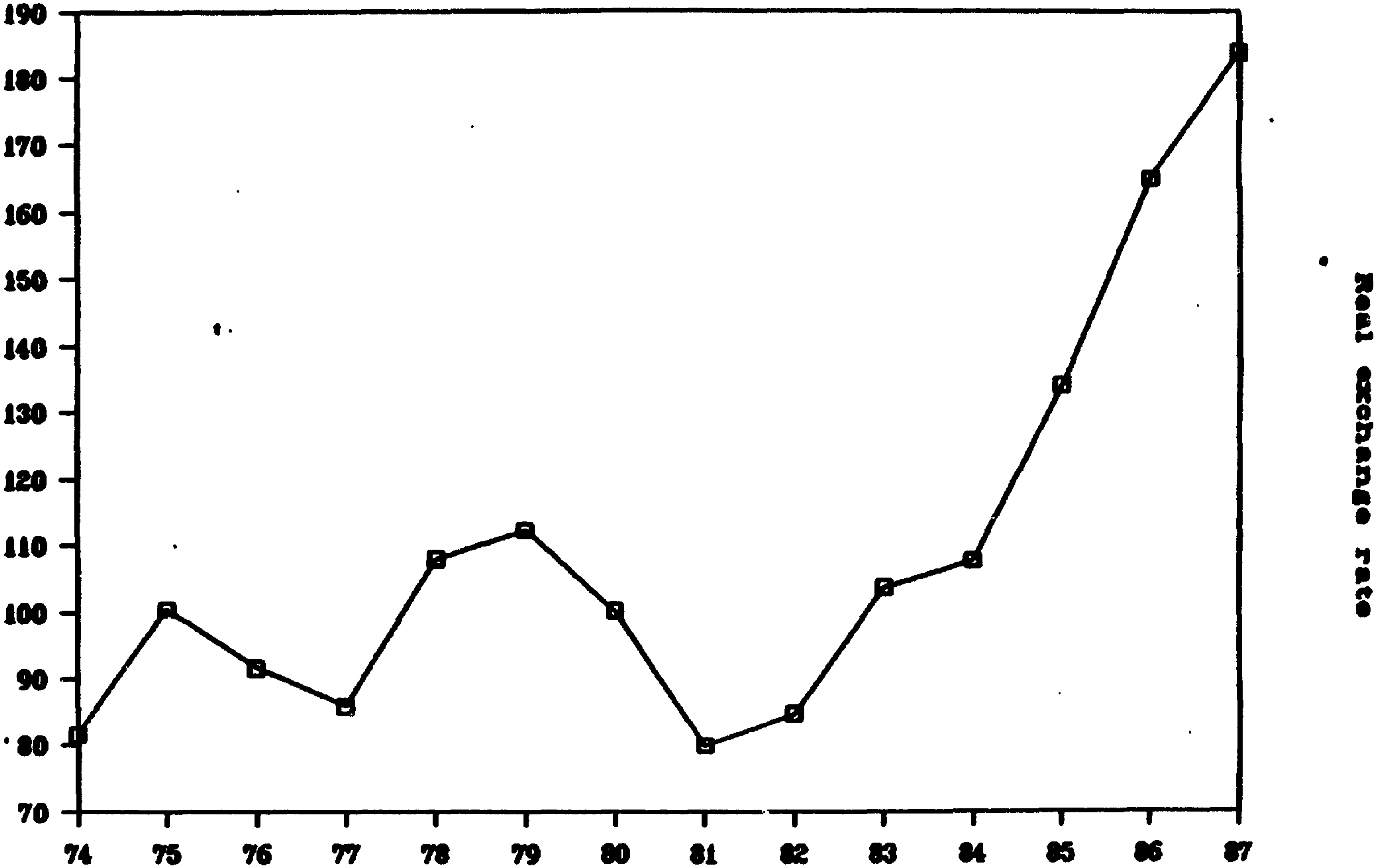
3/ Includes only medium- and long-term external debt.

4/ In order to express total external debt to current pesos, the average nominal exchange rate of the banking system was used.

5/ Measured with national account information at constant prices.

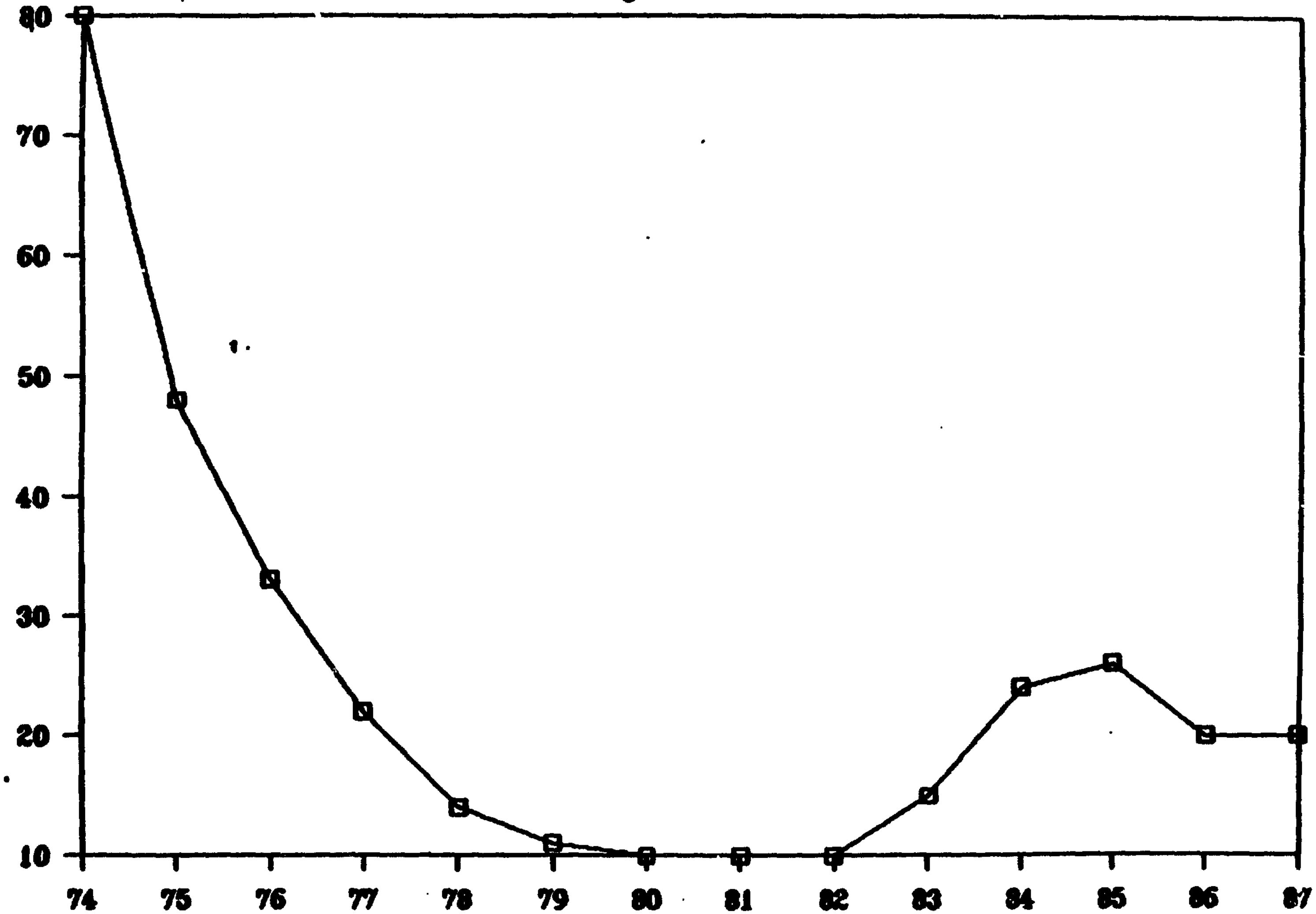
GRAPH 1

Real Exchange Rate



GRAPH 2

Average Tariff



Average tariff

Appendix[1]

Principal Reforms
(Chronological Synthesis)

Commercial Policy[2]

September 1973 (pre-reform situation): Quantitative restrictions were widespread. Tariffs ranged from 0 percent to 750 percent, with a mean value (weighted by the number of tariff positions) of 105 percent, a mode of 90 percent and a median of 80 percent. There were 2,872 tariff positions subject to an import deposit of 10,000 percent of the CIF value.

September 1973-July 1975: The highest nominal tariff was reduced from 750 percent to 140 percent and then to 120 percent. The mean weighted tariff was reduced from 105 percent to 57 percent.

August 1975-November 1977: A tariff goal was defined with six nominal levels between 10 percent and 35 percent, to be enacted in the first quarter of 1978. This structure was reached in August 1977 because of an anticipation of the last two stages. During this period the highest nominal tariff dropped from 120 percent to 35 percent (except for the motorcar industry) and the mean weighted tariff from 44 percent to 19.7 percent.

December 1977 onwards: In December 1977 a target structure was established with a 10 percent uniform tax to be reached in June 1979. The target was reached gradually by means of small monthly adjustments. In this period the mean weighted tariff went from 19.7 percent to 10.1 percent.

Complementary aspects of the reforms: All tariff exemptions were eliminated. First, the public sector was subjected to the general regime as early as 1974. Consumption surcharge taxes that imposed a higher rate on imports than on domestically produced competing goods were eliminated. By September 1976, prior deposit requirements on imports except cars and used or damaged merchandise were eliminated, and the list of allowed import items was replaced by a short list of forbidden items. Finally, in August 1981 the list of forbidden items was eliminated.

Price Liberalization[3]

September 1973 (pre-reform situation): More than 3,000 prices were fixed by DIRINCO (under the Commerce Department, a part of the Ministry of the Economy).

1/ This appendix is from Corbo (1985b).

2/ For a good description of the commercial policies during this period, see Torres (1982).

3/ Based on Wisecarver (1985).

October 1973: Law decree 522 defined three groups of goods and services: those whose prices were to be freely determined (the majority); those whose prices would continue to be fixed by DIRINCO (by means of cost studies) (33 goods and services); and a group of 18 goods whose prices were to be reported to DIRINCO, even though they were to be freely determined.

October 1973-May 1982: The general tendency was toward price liberalization. In December 1980, law decree 3529 was enacted forbidding items in the reported price category from being reclassified as fixed price goods and those freely priced ones to be put either under the reported price category or the fixed price category.

Labor

September 1973 (pre-reform situation): The following items were legally included in individual contracts: work hours (normal and overtime pay), work conditions, length of vacation, salary (at least the minimum) and so on. In addition, a lump sum payment for each year of work made labor dismissal extremely difficult and expensive.

1974 onwards: Discriminatory benefits were slowly eliminated; family allowances and retirement ages were made uniform for blue-collar and white-collar workers. Social security contributions were slowly reduced. Union power was heavily reduced.

1978 and 1981: Efforts were made to permit greater bargaining flexibility for vacations, indemnizations and profit-sharing. Further, employers were allowed to lay-off workers without justification. Minimum wage market coverage was reduced.

July 1979: A "Labor Plan" was enacted. This plan reintroduced collective bargaining for a fraction of the labor force. In contract bargaining, the lowest offer that employers could make had to be equal to the previous wage adjusted by the CPI.

External Capital Markets[4]

The reforms in the capital market were too numerous and in the initial stage lacked clear direction. Among the main reforms were the following.

September 1977: Commercial banks were allowed to become indebted under Article 14 of the exchange law.[5] A monthly minimum limit of 5 percent of capital and reserves was imposed for flows under this type of operation.

4/ Extracted from Gutierrez (1982) and Rosende (1981).

5/ Article 14 refers to the permission given by the Central Bank to a borrower for future access to the exchange rate market to service a foreign debt.

January 1978: The Central Bank established a stock limit of 25 percent of capital and reserves for debt under Article 14.

March 1978: The stock limit was raised to 160 percent of the capital plus reserves of commercial banks.

April 1978: The global limit was raised to 180 percent and a sublimit of 160 percent was set for debt with a mean amortization of 36 months or lower. The Article 14 limits were raised to 45 percent and 25 percent for debt of the above types. This credit had to be channeled toward dollar-denominated debt. For the first time, a limit on external debt was imposed on development banks. This limit was 400 percent of capital and reserves, or 500 percent if the excess over the 400 percent was covered by credits with a maturity of 36 months and over.

December 1978: The global limit and sublimit were raised to 180 percent and 215 percent for commercial banks and to 400 percent and 600 percent for development banks. The limit under Article 14 was raised from 45 percent to 60 percent.

April 1979: The sublimit of 215 percent was raised to 225 percent for commercial banks, the Article 14 limit from 60 percent to 70 percent. A variable reserve requirement was established for external credits depending on the length of maturity of the loans: 10 percent for those with a maturity of 48 to 66 months, 15 percent for those of 36 to 48 months, and 25 percent for those of 24 to 36 months.

June 1979: The global limits on external borrowing were eliminated. From this moment on, the only limitation on bank indebtedness was the lawful internal limit on total debt: 20 times capital and reserves. Debt limits under Article 14 were eliminated. The monthly limits under Article 14 were maintained, but reduced to 5 percent of capital and reserves or $1 million, whichever was greater.

April 1980: All monthly limits under Article 14 were lifted.

September 1980: Commercial banks were allowed to lend in external markets using their own resources.

December 1981: For the first time, commercial banks were allowed to lend short term (180 days) with external credit for purposes other than financing commercial operations.

May 1982: Commercial banks were allowed to obtain external credit with a maturity under two years subject to a reserve requirement of 20 percent.

July 1982: Commercial banks were allowed to use part of their short-run foreign credits to lend in pesos, with a limit of 50 percent of capital and reserves.

Domestic Financial Markets[6]

a) Interest Rates

Pre-reform: Nominal interest rates were fixed by the Central Bank. As the resulting real interest rates were highly negative, most credit was allocated by quotas.

May 1974: Law Decree 455 modified the interest rate concept to the quantity that the creditor received and that exceeded the capital value properly adjusted by inflation. In the same law decree, free bargaining of the interest rate was established, subject to the restriction that it not exceed 50 percent of the current interest rate for inflation-adjustable operations and non-adjustable operations, whichever the case.

September and October 1974: Commercial banks were allowed by the Central Bank to determine freely the interest rate for deposits with a maturity longer than 60 days, a maturity that was later lowered to 30 days.

June 1975: The Central Bank allowed commercial banks and the Banco del Estado to determine freely the interest rate on both inflation-adjustable operations and non-inflation-adjustable operations.

b) Operational and Institutional Aspects

December 1973: Establishment of new banks was prohibited until December 1974. To relax this limitation, the so-called "operative representation of foreign banks" was created, but these entities could not operate in the domestic deposit market nor extend domestic currency credits.

December 1974: Rules were established with respect to the organization and functioning of financial institutions, which were to be corporations with the sole social objective of acting as financial intermediaries. Minimum capital limits were established together with specifications of operations that were allowed or not allowed. Limits on investments and credits to the same natural or legal entity were imposed. The banking law was modified, so that no natural entity could own more than a 1-1/2 percent of the capital of a bank, a limit that was raised to 3 percent if the entity was a legal one. For new banks, this limit would be enforced five years after operations started. Commercial, development and mortgage banks were not allowed to have shares of small financial institutions. Foreign banks were permitted to establish branches and offices in Chile.

January 1976: A law concerning the management of Investment Fund Societies (Fondos Mutuos) regulated which investment instruments could be bought, such as corporate shares, bonds, debentures, IOUs, government debt and other debt. Minimum capital requirements were raised, regulatory provisions were established, and all types of debt instruments were enlarged.

6/ Based on "Evolucion de las principales normas que regulan el mercado financiero chileno, Septiembre 1973 - Junio 1980", Banco Central de Chile, 1981.

Foreign Exchange Policy[7]

September 1973 (pre-reform situation): There were multiple exchange rates, parallel exchange markets and a large overvaluation of the peso.

October 1973: There was a maxi-devaluation, and the exchange markets were reduced to three.

August 1974: The special exchange rate for copper exports was eliminated. The spot market dollar initially suffered two devaluations and later another 15. The average rate of devaluation for the year was 6.1 percent. The total annual devaluation in this market was 166.7 percent. In the banking market, 24 devaluations were made during the year; the result was an average devaluation rate of 6.9 percent, with an annual rate of 392.1 percent.

1975: The exchange rate policy consisted of small periodic devaluations.

June 1976: A 10 percent revaluation was effected.

August 1976: An exchange rate system with one rate was reached.

March 1977: A 10 percent revaluation was effected.

December 1977: The government announced that the devaluation rate would exceed the inflation rate to compensate for the tariff reductions.

February 1978: A formal tablita consisting of devaluations at a decreasing rate was established. This one lasted until June 1979.

June 1979: The exchange rate was fixed at the rate programmed for December 1979 in the later tablita, with the concurrent announcement that this fixing would last until February 1980.

December 1979: The fixed rate was extended indefinitely.

June 1979-June 1982: An 18 percent devaluation ended with the fixed rate period. The new system consisted of one in which the peso was pegged to a basket of foreign currencies.

August 1982: The floating rate policy was enforced.

September 1982: A new tablita, with monthly devaluations equivalent to the previous month's inflation rate minus 1 percent, was announced. Access to the exchange market was severely restricted.

7/ Ffrench-Davis (1979) and Meza (1981).

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